Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for adjusting data modulation at a base station comprising:

receiving data in data blocks from a higher layer ARQ mechanism at a transmitter for transmission;

formatting the received data into packets for transmission, the packets being smaller in size than the data blocks, and each packet having a particular type of encoding/data modulation;

appending an error check sequence for each packet;

providing a physical layer ARQ mechanism performing steps including:

transmitting the packets;

storing the packets for retransmission in a buffer memory incorporated into the transmitter;

monitoring a return channel for receipt of an acknowledgment for each packet that the packet has been received;

limiting the number of retransmissions to an operator-defined integer value;

clearing the buffer memory after the integer value is reached; and

retransmitting an original or selectively modified packet at the transmitter in response to failure to receive a corresponding acknowledgement for a given packet; wherein the physical layer ARQ mechanism comprising a physical layer transmitter operates transparently with respect to the higher layer ARQ mechanism;

receiving a corresponding acknowledgement for a given packet, wherein a mechanism configured to receive the corresponding acknowledgment for the given packet operates transparently with respect to the higher layer ARQ mechanism;

collecting retransmission statistics and adjusting the particular data/modulation using the collected statistics;

~~demodulating received packets;~~

buffering, decoding, and detecting packet errors; and

generating an acknowledgement for each received packet if that packet has an acceptable error rate.

2. (Original) The method of claim 1 wherein the particular type of encoding/data modulation is forward error correction (FEC).

3. (Original) The method of claim 2 wherein the packets are transmitted using an orthogonal frequency division multiple access (OFDMA) air interface and the particular FEC encoding/data modulation adjusting is performed in addition to selective nulling of subchannels in an OFDMA set.

4. (Original) The method of claim 1 wherein the packets are transmitted using a single carrier having a frequency domain equalization (SC-FDE) air interface.

5. (Original) The method of claim 1 wherein the return channel is the fast feedback channel when the packets are transmitted using a code division multiple access (CDMA) air interface.

6. (Original) The method of claim 1 further comprising:

identifying a packet as having an unacceptable error rate responsive to receipt of a negative acknowledgment.

7 - 9. (Canceled).

10. (Previously presented) The method of claim 1 wherein the physical

layer ARQ mechanism reduces retransmissions required by the higher layer ARQ mechanism.

11. (Canceled).